

# PATENT COOPERATION TREATY

From the:  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

|   |  |  |  |                    |
|---|--|--|--|--------------------|
| <b>To:</b><br><br>WRAY & ASSOCIATES<br>Level 4 The Quadrant<br>1 William Street<br>PERTH WA 6000  |  |  | Date of mailing<br><i>(day/month/year)</i>         | <b>24 NOV 2005</b> |
| Applicant's or agent's file reference<br><b>115775:JHK</b>  |  |  | <b>FOR FURTHER ACTION</b><br>See paragraph 2 below |                    |
| International application No.<br><b>PCT/AU2005/001344</b>   | International filing date <i>(day/month/year)</i><br><b>5 September 2005</b> | Priority date <i>(day/month/year)</i><br><b>3 September 2004</b> |  |                    |
| International Patent Classification (IPC) or both national classification and IPC<br><b>Int. Cl. <sup>7</sup> E21B 25/16, 47/024, 47/09</b> |  |  |  |                    |
| Applicant<br><b>AUSTRALIAN MUD COMPANY LTD et al</b>  |  |  |  |                    |

**1. This opinion contains indications relating to the following items:**

- |                                     |              |  |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the opinion   |
| <input type="checkbox"/>            | Box No. II   | Priority   |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| <input checked="" type="checkbox"/> | Box No. IV   | Lack of unity of invention   |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input checked="" type="checkbox"/> | Box No. VI   | Certain documents cited  |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application   |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application  |

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

|   |   |
|---|---|
| Name and mailing address of the IPEA/AU<br>AUSTRALIAN PATENT OFFICE<br>PO BOX 200, WODEN ACT 2606, AUSTRALIA<br>E-mail address: pct@ipaustalia.gov.au<br>Facsimile No. (02) 6285 3929 | Authorized Officer<br><b>S. GHOSH</b><br>Telephone No. (02) 6283 2163 |
|---|---|

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

**PCT/AU2005/001344**

**Box No. I      Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language: \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**Box No. IV      Lack of unity of invention**

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:

☒ paid additional fees

☐ paid additional fees under protest

☐ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

☐ complied with

☒ not complied with for the following reasons:

1. Claims 1 to 23 are directed to a core drill having a core orientation device, the core orientation device for the core drill and a method of obtaining and orientating a core sample. It is considered that an arrangement for providing signals associated with a physical orientation of the core orientation device, processing means for processing the signals to establish a measure of the physical orientation of the core orientation device at a particular moment in time, means for storing data and means to provide the measure of the physical orientation of the core orientation device when required comprises a first "special technical feature".

2. Claims 24 to 31 are directed to an orientation device and a method for providing an indication of the orientation of a core sample relative to a body of material from which the core sample has been extracted. It is considered that means for determining and storing the orientation of the device at predetermined time intervals relative to a reference time, means for inputting a selected time interval, means for relating the selected time interval to one of the predetermined time intervals and providing an indication of the orientation device at the selected time interval comprises a second "special technical feature".

Since the abovementioned groups of claims do not share any of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept, **a priori**.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

☒ all parts

☐ the parts relating to claims Nos.

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**Box No. V**      **Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

|                               |             |     |
|-------------------------------|-------------|-----|
| Novelty (N)                   | Claims 1-33 | YES |
|                               | Claims      | NO  |
| Inventive step (IS)           | Claims 1-33 | YES |
|                               | Claims      | NO  |
| Industrial applicability (IA) | Claims 1-33 | YES |
|                               | Claims      | NO  |

D17

**2. Citations and explanations:**

The following documents identified in the International Search Report have been considered for the purposes of this opinion:

D1 : CA 2456506   D2 : US 5105894   D3 : RU/2160821

Novelty (N) and Inventive Step (IS) Claims 1-33

Neither of the documents D2 and D3 (both published before the priority date) do not disclose all of the features of claims 1 -33.

Therefore the subject matter of these claims is **new** and is **not obvious** and, as such meets the requirements of Articles 33(2) and 33(3) of the PCT with regard to novelty and inventive step, respectively.

With regard to the document(s) listed in Box VI under "certain documents cited", these are documents published prior to the international filing date but later than the priority date claimed but which would otherwise be considered to be of particular relevance.

Under the PCT, novelty is considered only in respect of documents published before the priority date. The relevance of a document published after the priority date is dependent upon national law. Such documents are excluded from consideration in preliminary examination, under the PCT Guidelines but have been included here for information.

Industrial Applicability (IA)

The invention defined in the claims is considered to meet the requirements of Industrial Applicability under Article 33(4) of the PCT because it can be made by, or used in, industry.

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**Box No. VI      Certain documents cited**

**1. Certain published documents (Rules 43bis.1 and 70.10)**

| <u>Application No.<br/>Patent No.</u> | <u>Publication date<br/>(day/month/year)</u> | <u>Filing date<br/>(day/month/year)</u> | <u>Priority date (valid claim)<br/>(day/month/year)</u> |
|---------------------------------------|--|---|---|
| P, X CA 2456506                       | 3 January 2005                               | 3 February 2004                         | 3 February 2004   |

This document discloses all of the features of claims 1-13, 15, 16, 18 and 20-23. The features added by claims 14, 17 and 19 (although not disclosed) are mere workshop improvements and do not involve an inventive step. See the whole document.

**2. Non-written disclosures (Rules 43bis.1 and 70.9)**

| <u>Kind of non-written disclosure</u> | <u>Date of non-written disclosure<br/>(day/month/year)</u> | <u>Date of written disclosure<br/>referring to non-written disclosure<br/>(day/month/year)</u> |
|---------------------------------------|--|--|
|                                       |  |  |

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**Box No. VIII    Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. Claim 11 lacks clarity in that the scope of term "integration means" cannot be clearly ascertained.  
A similar observation applies to claims 13 and 21 with regard to "means for maintaining knowledge".
2. Claim 20 commences with the words "According to a third aspect ....". It should perhaps define "A method of obtaining ....".